

1. An intraluminal catheter comprising:

a) an elongated catheter shaft having proximal and distal ends, a port in the distal end, and an inner lumen extending at least within a distal portion of the catheter shaft to the port in the distal end; and

b) a distal extremity of the catheter shaft having a tubular portion with an expanded section of cylindrical shape having an outer diameter greater than an outer diameter of (an unexpanded section of the tubular portion proximal to the expanded section)

2. The intraluminal catheter of claim 1 wherein the expanded section of the distal tubular extremity has a length of about 0.1 to about 1 cm.

3. The intraluminal catheter of claim 1 wherein the expanded section of the distal tubular extremity has a length of about 0.2 to about 0.5 cm.

4. The intraluminal catheter of claim 1 wherein a portion of the distal tubular extremity distal to the expanded portion is unexpanded.

5. The intraluminal catheter of claim 1 wherein the length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.2 to about 1.3 cm.

6. The intraluminal catheter of claim 4 wherein the unexpanded portion of the distal tubular extremity distal to the expanded portion has smaller transverse dimensions than transverse dimensions of the unexpanded portion of the distal tubular extremity proximal to the expanded portion thereof.

Please add the following new claims, claims 14-30, as indicated below:

14. (New) A balloon catheter comprising:

a. an elongated catheter shaft having proximal and distal ends, a port in the distal end, a guidewire lumen extending at least within a distal portion of the catheter to and in fluid communication with the port in the distal end and an inflation lumen extending through the catheter shaft to a location spaced proximal to the distal end;

b. a balloon on the distal portion of the catheter shaft having an interior chamber which is in fluid communication with the inflation lumen and a distal skirt;

c. an inner tubular member extending through the interior chamber of the balloon, having the distal balloon skirt secured to an exterior location on the inner tubular member and having an expanded portion extending beyond the distal skirt of the balloon which has inner transverse dimensions greater than inner dimensions of the distal skirt of the balloon.

15. (New) The catheter of claim 14 wherein the inner tubular member has a portion distal to the expanded distal shaft extremity which tapers to outer transverse dimensions smaller than the outer transverse dimensions of the expanded distal extremity.

16. (New) The catheter of claim 15 wherein the tapered portion distal to the expanded portion has transverse dimensions smaller than transverse dimensions of the unexpanded portion proximal to the expanded portion.

17. (New) The catheter of claim 14 wherein the expanded distal shaft extremity has a length of about 0.1 to about 1 cm.

18. (New) The catheter of claim 14 wherein the expanded distal shaft extremity has a length of about 0.2 to about 0.5 cm.

19. (New) The catheter of claim 14 wherein a portion of the distal tubular extremity distal to the expanded portion is unexpanded.

20. (New) The catheter of claim 14 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.2 to about 1.5.

21. (New) The catheter of claim 14 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.3 to about 0.7.

22. (New) The catheter of claim 14 wherein the expanded portion of the inner tubular member has a cylindrical shape.

23. (New) A rapid exchange-type dilatation catheter comprising:

a) an elongated catheter shaft having proximal and distal ends, a first port in the distal end, a second port spaced a short distal proximal to the distal end and a substantial distance from the proximal end of the catheter shaft, a guidewire lumen which is disposed at least within a distal portion of the catheter shaft and which extends between and is in fluid communication with the first port and with the second port, an inflation lumen extending through the catheter shaft to a location spaced proximal to the distal end;

b) a balloon on the distal portion of the catheter shaft which has an interior chamber in fluid communication with the inflation lumen and which has a distal skirt;

c) an inner tubular member extending through the interior chamber of the balloon, with a distal skirt of the balloon secured to an exterior location on the inner tubular member; and

d) a distal shaft extremity distal to the exterior location which is at least in part expanded and which has inner transverse dimensions greater than inner dimensions of the distal skirt of the balloon.

24. (New) The rapid exchange dilatation catheter of claim 23 wherein the inner tubular member has a portion distal to the expanded distal shaft extremity which tapers to outer transverse dimensions smaller than the outer transverse dimensions of the expanded distal extremity.

25. (New) The rapid exchange type balloon catheter of claim 24 wherein the tapered portion distal to the expanded portion has transverse dimensions smaller than transverse dimensions of the unexpanded portion proximal to the expanded portion.

26. (New) The rapid exchange type balloon catheter of claim 23 wherein the expanded distal shaft extremity has a length of about 0.1 to about 1 cm.

27. (New) The rapid exchange type balloon catheter of claim 23 wherein the expanded distal shaft extremity has a length of about 0.2 to about 0.5 cm.

28. (New) The rapid exchange type balloon catheter of claim 23 wherein a portion of the distal tubular extremity distal to the expanded portion is unexpanded.

29. (New) The rapid exchange type balloon catheter of claim 23 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.2 to about 1.5.

30. (New) The rapid exchange type balloon catheter of claim 23 wherein length of the distal tubular extremity including the expanded portion and the distal unexpanded portion is about 0.3 to about 0.7.

REMARKS

The above newly added claims are believed to define patentable subject matter and are well supported by the specification. Applicants respectfully request consideration and an early allowance thereof.

Claims 1-6 stand rejected under the judicially created doctrine of double patenting. However, claims 1-6 were withdrawn from consideration in the parent application as a result of a restriction requirement put forth by the Examiner. In view of this restriction requirement with respect to claims 1-6, the double patenting rejection should not apply. Applicant respectfully requests that the rejection be withdrawn. Favorable reconsideration of these claims are earnestly solicited.